Request For Material Approval

Form Sheet Title:					
Doc Ref.:	SBC-RMA-006	Rev.	1	Date	07-Jul-23
Project Title	Residential commercial building G + 2 + Roof			Plot No.	0345
Employer	Khalifa Sultan Al-Suwaidi			Location	Liwara 2, Ajman, UAE.
Consultant	Eng. Adnan Saffarini Office	Contractor		Saud Building Contracting	
Consultant's Eng.		Consultant's MEP Eng.			

Description / Technical Literate / Material Submital for:

BITUMEN BASED WATERPROFFING MEMBRANE

Area of Application	UNGER GROUND	**sample:** ☑ **Included** ☐ **Not included**
Manufacturer Name	POLYBIT	
Supplier Name	SAUD BUILDING MATERIALS TRADING	

Requested by Contractor	**Received by Consultant**
Name: ENGR. Ahmed سعود لمقاولات البناء SAUD Building Cont.	Name:
Signature:	Signature:
Date: 09/07/ 2023 Time: 10:00 AM	Date: / / 20 Time: : AM/PM

Consultant's Comments (Project Manager / Resident Manager)

approved as noted

SBS membrane 4 mm الطبقة

* يجب استخدام طريقة التثبيت من خلال إلصاق الطبقة على السطح (Method of Installation)

* يجب تنعيم السطح بالمونة للتخلص من الحفر والتشققات وتشطيب الزوايا والحواف قبل البدء بالعزل

* يجب تعديل الزوايا الحادة وتحويلها إلى زوايا دائرية قبل البدء بأعمال العزل

Approval Status:	**Received by Consultant's Representative:**
☐ **Approved**	Name: Eng. Ali Elgendi
☑ **Approved As noted**	Signature:
☐ **Re-Submit As noted**	Date: 10/7/2023 Time: : AM/PM
☐ **Not Required**	
☐ **Rejected**	

Received by Contractor's Representative:

Name:

Signature:

Date: / / 20 Time: : AM/PM

Polybit

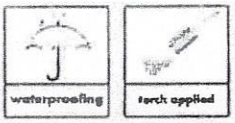
PLASTIFELT

Fibre reinforced polymer modified bituminous waterproofing membrane

Bituminous waterproofing membrane, manufactured from a mixture of bitumen and selected polymers, which are blended together to obtain excellent waterproofing properties.

CHARACTERISTICS

- Excellent resistance to positive water & vapor pressure
- Good dimensional stability under tension
- Good flexibility. Can accommodate structural movements
- Resistant to water borne chemicals



DESCRIPTION

Plastifelt is a polymer modified bituminous waterproofing membrane, manufactured from a mixture of bitumen and selected polymers, which are blended together to obtain good waterproofing properties. The bitumen compound also exhibits high heat and UV resistance properties. The polymerized bitumen is coated on to a dimensionally stable reinforcement core of non woven glass fibre carrier.

FIELDS OF APPLICATION

Plastifelt is used as waterproofing membrane on the following structures:

- inverted roofs & parapets
- terraces, balconies & patios
- sunken slabs
- bridges & tunnels
- airport aprons & ramp areas

Plastifelt membranes in tropical regions can also be used for waterproofing of below ground concrete structures like:

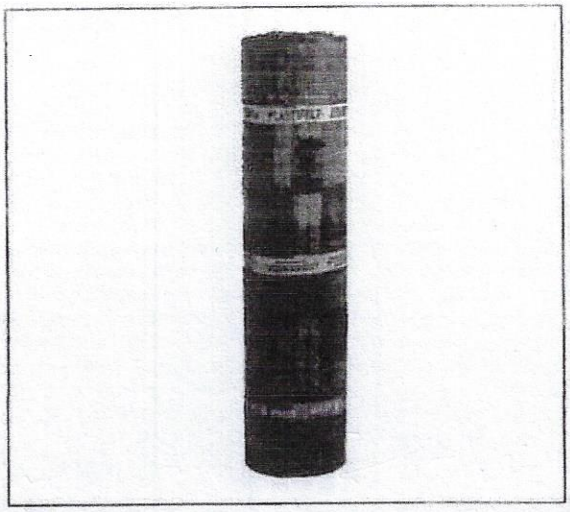
- concrete foundations & footings.
- basements
- pile heads
- swimming pools & water retaining structures (externally)

APPLICATION INSTRUCTIONS

The application temperature should be between 5 °C to 55 °C. Application procedures may vary depending on site conditions. The general recommended guidelines for the application of the waterproofing system is as follows:

Surface preparation

The surface shall be cleaned thoroughly of all contaminants like dust, traces of curing compound, oil and grease. All surface imperfections, protrusions, structurally unsound



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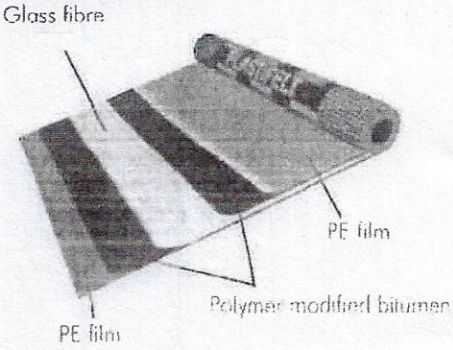
and friable concrete must be removed and repaired with a suitable Polycrete* concrete repair mortar.

Priming

Apply Polyprime SB*(Solvent based primer) @ 4-6 m²/L to a clean smooth and dry surface by brush, roller or spray. Allow the primer to dry prior to the application of the membrane. As the viscosity of the primer is low, it easily penetrates into the concrete pores which promotes adhesion between the membrane and the concrete surface. In addition to that the primer also acts as a binder for the dust particles which gets accumulated on the concrete surface even after cleaning.



Quality for Professionals

Alignment

Start the installation of all membrane plies from the low point or drains, so the flow of water is over or parallel to the plies, but never against the laps. All overlaps of the membrane seams shall be installed so as to have «up» slope laps over «down» slope laps. Begin membrane application by unrolling the roll of Plastifelt membrane and aligning the side laps.Re-roll the roll halfway and stand on the unrolled portion to prevent shifting. Side overlaps should be a minimum of 100 mm and the end overlaps 150mm.

Torching

Plastifelt membranes are installed by using a cylinder fed propane gas torch.Use of hand-held roofing torch is recommended as it affords a good control.If multiple burner torching machines are utilized, care must be taken to ensure the application of uniform heat and avoid overheating the membrane. Begin torching the embossed polyethylene side of the rolled portion of the membrane. Proper torching procedure involves passing the torch flame in an "L" pattern applying about 75 percent of the heat across the coiled portion of the roll and 25 percent across the substrate, including the lap area of the previously installed membrane. As the membrane is heated the embossing starts to melt away exposing a shiny bitumen surface. Roll forward the membrane and press firmly with the boot or roller against the substrate to bond well.The propane flame should be moved from side to side and up the lap edge while the membrane is slowly unrolled and adhered to the underlying surface. Subsequent shift of the roll shall be avoided after heating has begun. When complete, the remaining un-torched membrane shall be re-rolled and installed in the same manner. When one end is complete, re-roll the opposite end not yet torched, and install in the same manner. As subsequent rolls are installed, heat is applied to both the roll and the exposed laps of the membrane being overlapped onto. Be sure to heat the entire roll evenly, not just the lap areas, with extra concentration at the laps.

CAUTION:

Do not over torch the membrane as this will expose the reinforcement and cause damage to it.

Up stand

Flashing details are accomplished using cut pieces of Plastifelt membrane in combination with appropriate prefabricated flashing components.The same side lap and end lap rules apply to flashing details as to field membrane. All angles and abutments should be sealed with extra care to ensure full bonding. An appropriate flashing membrane (mineral surface membrane) shall be lapped with the base membrane and taken up on the parapet wall and tucked into a groove cut into the concrete. The grooves will be sealed with a suitable mastic sealant (Bituminastic)*.

Sealing

Heat both the overlaps and use round tipped trowel to seal the overlap. Adequate heat is confirmed when a uniform flow of melted bitumen compound flows evenly like a bead that oozes from the applied membrane's edges. Excess compound should be smoothened and pressed into the seam using a heated trowel. Any unbonded areas must be lifted and re-torched. Do not attempt to reseal by torching the top surface of the membrane.

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Thickness, [mm]	3.0 4.0	DIN EN 1849-1
Mass per unit area, [kg/m²]	3.0-3.3 4.0-4.3	DIN EN 1849-1
Reinforcement (fiber glass), [g/m²]	50	EN 29073-1
Coating asphalt softening point (R&B), [°C] penetration @25°C,[0.1mm]	Polymer Modified Asphalt >125 12-22	 ASTM D 36 ASTM D 5
Tensile strength (L/T), [N/5cm]	300/200	DIN EN 12311-1
Elongation @break, [%]	1.5/1.5	DIN EN 12311-1
Shear resistance @joints (L/T), [N/5cm]	300/200	DIN EN 12317-1
Tear resistance (L/T), [N]	50/70	DIN EN 12310-1
Hydrostatic pressure @3 bar (30m)	No leakage	BS EN 12390 (part 8)
Water absorption [%], [BSP]	< 0.50	ASTM D 5147
Heat resistance @100°C	no flow	DIN EN 52-123
VOC [g/l]	<50	ASTM D3960 / D2369

All values given are subject to 5-20% tolerance

STANDARDS

Plastifelt conforms to the requirements of UEAtc 2001 and ASTM.

STORAGE & SHELF LIFE

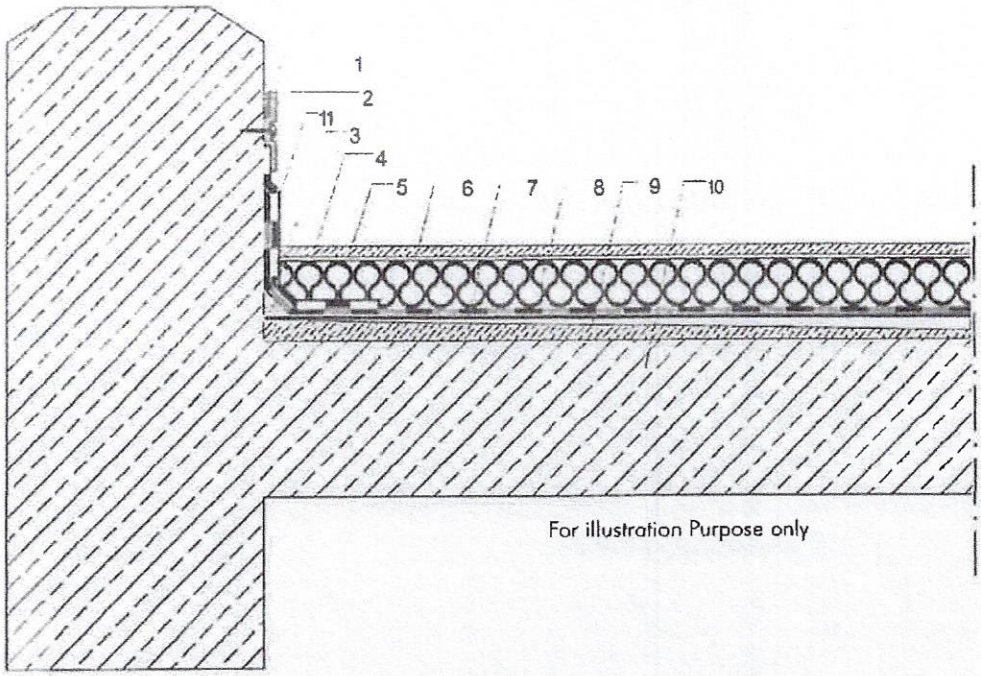
Plastifelt rolls must be stored in a shaded area on wooden pallets neatly covered by a thick fabric and tied securely in a manner that will minimize exposure to sunlight and UV. The membrane shall be protected from all sources of heat. Do not stack pallets on top of each other. The shelf life is 12 months if stored as per recommendations. Excessive exposure to sunlight, UV and other sources of heat will result in considerable deterioration of the product and reduce its shelf life.

SAFETY PRECAUTIONS

Any naked flame should be kept well away from the gas cylinders.When ignited the torch should be watched at all times.The torch should not be rested on finished

1 Bitumastic/Polysael PS
2 Aluminum metal flashing
3 Cement sand angle fillet
4 Cement sand screed / cement
5 Separation layer

1 Thermal insulation board
2 Bitumen membrane (Plastifelt)
3 Bitumen primer (Polyprime SB)
4 Foam concrete
5 RCC slab
5 Mineral membrane



For illustration Purpose only

roofing.Extreme care should be taken when working near combustible materials or items which might be scorched by the gas flame.

HEALTH & SAFETY

Plastifelt membranes contain a tacky bitumen compound which when applied can stick to human skin. Such stains can be removed by using a cloth dipped in a suitable cleaner.

SUPPLY

Plastifelt	3mm	1m x 10m, wt 30kg#
	4mm	1m x 10m, wt 40kg#
Polyprime SB		20L pail & 200L drum
Bitumastic		20kg pail

**Refer to website for TDS # Approximate weight*

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.
The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.

Polybit
Bituplus - SBS modified
bituminous waterproofing membrane
Excellent tensile and tear strengths
Chloride & sulphate resistant
Excellent flexibility
Quality for Professionals